

IN THE CLAIMS:

A listing of all claims pending is included hereafter:

1. (currently amended) A device for dosage of substances comprising:
 - a substance intake portion, having a plurality of substance compartments for the intake of the substance to be dosed;
 - an emptying portion for the complete emptying of at least one of the substance compartments each time in one step;
 - a weighing balance for the determination of the quantity of dosed substance; and
 - a control means for controlling the complete emptying of any one or more of the substance compartments each time in one step as needed dependent on the quantity of dosed substance as determined by means of the weighing balance.
2. (presently pending) The device according to claim 1, wherein the substance intake portion comprises substance compartments of various size classes, with which various quantities of substance to be dosed can be obtained.
3. (presently pending) The device according to claim 2, wherein at least some of the size classes are graduated across at least a factor of 5, preferably in the ratio 1:2:5.
4. (presently pending) The device according claim 1, wherein at least some of the substance compartments are pre-filled with the substance to be dosed and preferably are sealed.
5. (presently pending) The device according to claim 1, wherein the substance compartments are formed as vertically arranged tubes.
6. (presently pending) The device according to claim 5, wherein the tubes of different size classes have different inner diameters.
7. (presently pending) The device according to claim 5 wherein the inner diameters of the tubes are smaller than 5 mm, preferably smaller than 1 mm, more preferably smaller than 0.5 mm, in

particular preferably smaller than 0.1 mm.

8. (presently pending) The device according to claim 5, wherein at least some of the tubes narrow progressively from the top of the tube to the bottom of the tube.

9. (presently pending) The device according to claim 5, wherein at least some of the tubes have pointed or sharp-edged lower sections.

10. (presently pending) The device according to claim 5, wherein at least some of the tubes are pre-filled with the substance to be dosed and preferably the two ends of the tubes are sealed with foil.

11. (currently amended) The device according to claim ~~11~~1 wherein at least some of the substance compartments have an inner surface with an arithmetic mean roughness value R_a larger than 0.5 μm .

12. (presently pending) The device according to claim 1, further comprising various classes of substance compartments with inner surfaces with different arithmetic mean roughness values R_a .

13. (presently pending) The device according to claim 1, wherein at least some of the substance compartments have, on their inner surface, flexible lamellae and/or barbs.

14. (presently pending) The device according to claim 1, further comprising various classes of substance compartments with inner surfaces with different wettability.

15. (presently pending) The device according to claim 1, wherein the substance intake portion is automatically removable from the emptying portion.

16. (presently pending) The device according to claim 1, wherein the substance compartments are individually mounted in the substance intake portion and their number is

variable.

17. (presently pending) The device according to claim 1, wherein the substance compartments in the substance intake portion are individually displaceably mounted between a fill position, in which they are fillable, and an inactive position, in which they are not fillable.

18. (presently pending) The device according to claim 1, further comprising means for vertical displacement of the substance intake portion.

19. (presently pending) The device according to claim 1, wherein the emptying portion comprises means for the admission of pressure gas into every individual substance compartments.

20. (presently pending) The device according to claim 1, wherein for every substance compartment the emptying portion has a displaceable piston.

21. (presently pending) The device according to claim 1 wherein the emptying portion has means for the alteration of the geometry of every individual substance compartment, which further comprise means for the production of a mechanical pressure, a voltage or a temperature change.

22. (presently pending) The device according to claim 1, wherein the emptying portion has means for the alteration of the surface properties of the inner surface of every individual substance compartment, which further comprise means for the production of a voltage and/or a temperature change.

23. (presently pending) The device according to claim 1 wherein the emptying portion has means for the alteration of the flow properties of the substance to be dosed in every individual substance compartment, which further comprise means for the production of a voltage or a temperature change.

24. (presently pending) The device according to claim 1, wherein the emptying portion and the substance intake portion are arranged on the weighing balance such that they are weighed by said weighing balance.

25. (presently pending) The device according to claim 1, wherein the weighing balance or a second weighing balance is designed in order to receive a vessel to be filled and to measure the weight of the vessel and the substance dosed into the vessel.

26. (currently amended) A method for dosage of substances with a device for dosage of substances having a substance intake portion, with a plurality of substance compartments for the intake of the substance to be dosed; an emptying portion for the complete emptying of at least one of the substance compartments each time in one step; a weighing balance for the determination of the quantity of dosed substance; and, a control means for controlling the complete emptying of any one or more of the substance compartments each time in one step as needed dependent on the quantity of dosed substance as determined by means of the weighing balance;

the method comprising:

a) completely emptying in one step at least one substance compartment of a substance intake portion containing a substance such that substance is dosed into a vessel;

b) determining the quantity of substance dosed in the vessel using a weighing balance;
and

c) calculating with the control means whether, and if need be, how much additional substance must be dosed into the vessel, and according to the calculation result, either repeating steps a) to c) or stopping.

27. (presently pending) The method according to claim 26, wherein the substance intake portion comprises substance compartments of varying size classes, and starting with the greatest possible number of substance compartments of the largest possible size class being emptied into the vessel while it is still certain that the desired dosage quantity is not exceeded, then, proceeding with the greatest possible number of substance compartments of the next smaller size class being emptied into the vessel while it is still certain that the desired dosage quantity is not

exceeded, and repeating until the desired dosage quantity with the desired precision is achieved.

28. (presently pending) The method according to claim 26, wherein the quantity of dosed substance is determined after every emptying of a substance compartment.

29. (presently pending) The method according to claim 26, wherein the quantity of dosed substance is determined only after the emptying of several substance compartments.

30. (presently pending) The method according to claim 26, wherein the substance compartments are filled before step a) by dipping them in or inserting them in substance which is found in a supply container, and then removing the compartments from the container.

31. (presently pending) The method according to claim 30, wherein the weighing balance measures the weight loaded on it before and after filling of the substance compartments, and the control means calculates from this, and from the known geometry of the individual substance compartments, the approximate quantity of substance in each substance compartment.

32. (presently pending) The method according to claim 30, wherein after every emptying of a substance compartment of a size class, the approximate quantity of substance in the remaining substance compartments of this size class is newly estimated.

33. (presently pending) The method according to claim 30, wherein after the filling of the substance compartments, at least one substance compartment of each size class is emptied and by calculation of the weight difference before and after the emptying of each substance compartment, the approximate quantity of substance in a substance compartment of this size class is determined.

34. (presently pending) The method according to claim 26, wherein dosing first takes place in an intermediate container, and when the desired dosage quantity with the desired precision is achieved, the intermediate container is emptied into the vessel; whereas if the desired dosage quantity with regard to the desired precision is exceeded, the intermediate container is emptied

again and the dosage is begun again.

35. (presently pending) The method according to claim 34, wherein the actual dosage quantity in the intermediate container is determined by a second weighing balance on which the intermediate container is arranged for measurement.